

## AMENDMENTS TO THE CLAIMS

Claims 1-3 (Cancelled).

4. (New) A look-ahead stack management system for configuring a look-ahead state of an operand stack in a computer system capable of out-of-order execution, comprising:

a data file having entries each being able to hold data; and

an advanced mapping file having entries each being able to hold an entry address in said data file, wherein:

each time a modification is to be made on said operand stack, said advanced mapping file is so managed that, for each entry of said advanced mapping file that is to hold an entry address in said data file allocated to an operand stack element, the address of the entry of said advanced mapping file is to indicate the number of operand stack elements over said operand stack element.

5. (New) A look-ahead stack management system for configuring a look-ahead state of an operand stack in a computer system capable of out-of-order execution, comprising:

a data file having entries each being able to hold data; and

an advanced mapping file having entries each being able to hold an entry address in said data file, wherein:

each time a modification is to be made on said operand stack, said advanced mapping file is so managed that, for each entry of said advanced mapping file holding an entry address in said data file allocated to an operand stack element, if the entry of said advanced mapping file is to hold an entry address in said data file allocated to an operand stack element, the number of operand stack elements over the operand stack element whose value is held / to be held in the entry of said data file indicated by the address held in the entry of said advanced mapping file is to be unchanged.